

ABSTRACT

According to a containing-fullerene production method by the background art, containment target ions obtained by ionizing containment target atoms have been irradiated to empty fullerene within a vacuum vessel. This has resulted in a problem of a lower formation efficiency of containing-fullerene, in case of forming containing-fullerene which internally contains an atom larger than a six-membered ring of fullerene. It is thus devised to irradiate ions having larger diameters and masses to a fullerene film, simultaneously with irradiation of containment target ions thereto. Since ions having larger masses collide with fullerene molecules, the fullerene molecules are largely deformed and openings thereof are enlarged. Containment target ions are caused to enter cages of fullerene molecules, thereby increasing a probability of formation of containing-fullerene.